

# WEST Search History

DATE: Tuesday, November 12, 2002

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT; PLUR=YES; OP=AND</i>			
L19	L18 and galectin	0	L19
L18	l16 and L17	49	L18
L17	daniel.in.	36166	L17
L16	hsu.in.	3716	L16
L15	L14 and galectin	0	L15
L14	l12 and L13	37	L14
L13	hideki.in.	5973	L13
L12	sano.in.	2371	L12
L11	l9 and L10	2	L11
L10	fu-tong.in.	4	L10
L9	liu.in.	5535	L9
L8	monocyte or macrophage	18454	L8
L7	l3 and L6	17	L7
L6	migration	56872	L6
L5	l3 and L4	8	L5
L4	cell with migration	6367	L4
L3	l1 or L2	27	L3
L2	galectin adj 3	27	L2
L1	galectin-3	26	L1

END OF SEARCH HISTORY

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:38:35 ON 12 NOV 2002

=> file caplus medline biosis

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 11:38:44 ON 12 NOV 2002  
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FILE 'MEDLINE' ENTERED AT 11:38:44 ON 12 NOV 2002

FILE 'BIOSIS' ENTERED AT 11:38:44 ON 12 NOV 2002  
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=> galectin 3

L1 1152 GALECTIN 3

=> cell(s)migrat?

L2 120256 CELL(S) MIGRAT?

=> 11 and 12

L3 61 L1 AND L2

=> 13 and 1970-2000/py

L4 40 L3 AND 1970-2000/PY

=> monocyte or macrophage

L5 447251 MONOCYTE OR MACROPHAGE

=> 11 and 15

L6 160 L1 AND L5

=> 13 and 15

L7 11 L3 AND L5

=> 14 and 15

L8 8 L4 AND L5

=> dup rem l8

PROCESSING COMPLETED FOR L8  
L9 4 DUP REM L8 (4 DUPLICATES REMOVED)

=> d ti abs so 19 1-4

L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1  
 TI Human **galectin-3** is a novel chemoattractant for  
**monocytes** and **macrophages**  
 AB **Galectin-3** is a .beta.-galactoside-binding protein  
 implicated in diverse biol. processes. The authors found that  
**galectin-3** induced human **monocyte** migration in  
 vitro in a dose-dependent manner, and it was chemotactic at high concns.  
 (1.0 .mu.M) but chemokinetic at low concns. (10-100 nM). **Galectin**  
**-3**-induced **monocyte** migration was inhibited by its  
 specific mAb and was blocked by lactose and a C-terminal domain fragment  
 of the protein, indicating that both the N-terminal and C-terminal  
 domains  
 of **galectin-3** are involved in this activity.  
 Pertussis toxin (PTX) almost completely blocked **monocyte**  
 migration induced by high concns. of **galectin-3**.  
**Galectin-3** caused a Ca<sup>2+</sup> influx in **monocytes**  
 at high, but not low, concns., and both lactose and PTX inhibited this  
 response. There was no cross-desensitization between **galectin-**  
**3** and any of the **monocyte**-reactive chemokines examd.,  
 including **monocyte** chemotactic protein-1, **macrophage**  
 inflammatory protein-1.alpha., and stromal cell-derived factor-1.alpha..  
 Cultured human **macrophages** and alveolar **macrophages**  
 also migrated toward **galectin-3**, but not  
**monocyte** chemotactic protein-1. Finally, **galectin-**  
**3** was found to cause **monocyte** accumulation in vivo in  
 mouse air pouches. Thus, **galectin-3** is a novel  
 chemoattractant for **monocytes** and **macrophages** and its  
 effect is mediated at least in part through a PTX-sensitive (G  
 protein-coupled) pathway.  
 SO Journal of Immunology (2000), 165(4), 2156-2164  
 CODEN: JOIMA3; ISSN: 0022-1767

L9 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2  
 TI **Galectin-3** gene (LGALS3) expression in experimental  
 atherosclerosis and cultured smooth muscle cells  
 AB The **galectin-3** gene (LGALS3) encodes a  
 .beta.-galactose-binding lectin. LGALS3 expression is assocd. with  
 neoplastic transformation and with differentiation of **monocytes**  
 to **macrophages**. Factors involved in **migration**,  
 proliferation, adhesion, and differentiation of vascular smooth muscle  
**cells** (SMC) play a major role during atherosclerosis development.  
 Expression of the **galectin-3** gene was not detected in  
 quiescent SMC but was activated in aortas of hypercholesterolemic  
 rabbits,  
 in aortas of rats after balloon injury, and in cultured SMC. Thus,  
**galectin-3** prodn. is involved in the developmental  
 process of atherogenesis.  
 SO FEBS Letters (1998), 430(3), 307-311  
 CODEN: FEBLAL; ISSN: 0014-5793

L9 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS  
 TI Maintenance of granulocyte numbers during acute peritonitis is defective  
 in **galectin-3**-null mutant mice  
 AB **Galectin-3**, also known as the **macrophage**  
 marker Mac-2, is a member of a family of structurally related animal  
 lectins that exhibit specificity for .beta.-galactosides. To investigate  
 the role of **galectin-3** in acute inflammation, the  
 authors compared the no. of leukocytes present in the peritoneal cavity  
 of  
 wild type and **galectin-3** null mutant mice after i.p.

injection of thioglycolate broth. At day 1 after injection, the authors found no difference in the recruitment of mononuclear phagocytes and granulocytes to the peritoneal cavity. However, 4 days after thioglycolate injection, **galectin-3** mutant mice exhibited a significantly reduced no. of recoverable granulocytes compared to wild-type animals. As mutant granulocytes did not exhibit an accelerated rate of apoptosis and their uptake by **macrophages** appeared to be unaffected by the mutation, the phenotype described here suggests that **galectin-3** participates in an addnl. level of control during the resoln. of acute inflammation.

SO Immunology (1998), 94(3), 290-296  
CODEN: IMMUAM; ISSN: 0019-2805

L9 ANSWER 4 OF 4 MEDLINE DUPLICATE 3

TI Soybean agglutinin binds a 160-kDa rat **macrophage** membrane glycoprotein and enhances cell differentiation and activation.

AB Mature **macrophages** (M phi) differ from other rat leukocytes by their ability to bind soybean agglutinin (SBA). In this study we identify the SBA-binding structure on rat bone marrow-derived M phi (BMDM phi). Precipitation of iodinated membrane proteins from rat bone marrow **cells** (BMC) and BMDM phi with SBA revealed a major glycoprotein of Mr 160 kDa on BMDM phi but not on BMC. In addition minor bands **migrating** at 70 and 26 kDa were seen. Stimulation of BMDM phi with 100 nM SBA induced a decrease in surface density of Thy1.1 (MRC OX7) and His54 and an increase in the expression of MRC OX6 (RT1.B/I-A), MRC OX17 (RT1.D/I-E), MRC OX41 (gp 110/120), MRC OX42 (CD11b/c), Mac1 (CD11b/CR3) and Mac2 (**galectin-3**/IgE binding protein) antigen. Expression of other M phi differentiation antigens recognized by mAb MRC OX43 (M phi, endothelial **cells**) and ED9 (M phi/CD14 like) were not significantly altered. BMDM phi derived from cultures with M phi colony-stimulating factor (M-CSF) and SBA showed increased oxidative burst and phagocytic activity compared to **cells** cultured with M-CSF alone. Our data suggest that binding of a 160-kDa membrane glycoprotein on M phi by N-acetylgalactosamine-specific lectins stimulates M phi differentiation and activation.

SO IMMUNOLOGY LETTERS, (1996 Aug) 52 (1) 53-6.  
Journal code: 7910006. ISSN: 0165-2478.

=> logoff

FAOM Checklist

Appl. Ser. No.

09/805449

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Form 948 present?

10



Declaration (06-05)

PCT referred to?

priority dates OK?

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15

CIP duty? (06-05-09)



Meets conditions for priority (02-09)

W/A

Sequences in compliance?

20



Restriction/Election?

NA

Priority Docs present?

25



File wrapper labeled OK and initialed?

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Title (06-11)



Abstract (06-12 missing)  
(06-13 informs)  
(06-14, 15 content)

30



Figures (06-27)

35



Brief Description



Amendments?

na

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na

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07-29, 06-31?



07-34